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**REMARKS**

Claims 1, 4, 6, 8-9, 11-12, 14-15, 19-25, and 28 are currently being amended to fix unintentional typographical errors in the claims previously submitted, to obviate the Examiner's objections, and to further particularly point out and distinctly claim the subject matter which Applicant regards as the inventive subject matter currently desired.

These amendments do not introduce new matter within the meaning of 35 U.S.C. §132.

**1. Objection to the Oath or Declaration**

The Office Action states,

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP § § 602.01 and 602.02.

The oath or declaration is defective because: it is not executed, and it appears to be an oath from PCT prosecution, not US national prosecution.

**RESPONSE**

Applicant respectfully traverses the Examiner's objection to the declaration previously filed on June 1, 2005 with the original filing papers.

With regard to the Examiner's contention that a new oath in compliance with 37 C.F.R. § 1.67(a) needs to be submitted, Applicant notes that the original oath was submitted with the PCT Request and

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was filed the same day as the International Application, which this application is an 35 U.S.C. § 371 application thereof. Accordingly, since the declaration was filed the same day as the International Application, a serial number and filing date could not be listed on the Declaration. Notwithstanding, a declaration need not list the serial number and filing date to comply with 37 C.F.R. § 1.63, in particular, 37 C.F.R. § 1.63(b)(1). See MPEP § 602 (VI). As such, Applicant respectfully requests the Examiner to withdraw this objection.

With regard to the Examiner's contention the declaration submitted with the Request is not executed, Applicant respectfully traverses this objection. In particular, on page 5, Box VIII (iv), of the Request, under the Inventor's Signature line, the declaration clearly states, "(if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)". Accordingly, the inventors only need to execute this part of the Request, (i.e., the Inventor's Signature line) if the inventors signatures are not contained in the request. However, as shown on page 7 of the Request, all the inventor's signatures are present. As such, Applicant respectfully requests the Examiner to withdraw this objection.

With regard the Examiner's contention the declaration appears to be an oath from PCT prosecution, not US national prosecution, Application respectfully traverses this objection. In particular,

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nowhere in 35 U.S.C. § 25, 35 U.S.C. § 115, 35 U.S.C. § 116, 35 U.S.C. § 371(c)(4), or PCT Rule 4.17 is a "U.S. national" declaration required for U.S. prosecution. Accordingly, Applicant respectfully requests the Examiner to withdraw this objection.

## 2. Objection to the Abstract

The Office Action states,

The abstract of the disclosure is objected to because the coefficients on the number of carbon atoms are not subscripted, and the last line is not quite grammatical; in addition this last line should be drawn to Ziegler-Natta catalysts only since those are the only types which appear to be properly enabled in the specification. Correction is required. See MPEP § 608.01(b)

## RESPONSE

Applicant has submitted a substitute specification which complies with 37 C.F.R. § 1.125 herein. A marked-up copy is submitted herein as ATTACHMENT B, and a clean copy is submitted herein as ATTACHMENT C. The amendment to the specification does not constitute new matter within the meaning of 35 U.S.C. § 132.

With regard to the Examiner's contention the last line in the abstract should be drawn to Ziegler-Natta catalysts, Applicant traverses this. In particular, Applicant respectfully believes the proposed language by the Examiner unduly narrows the technical disclosure of the accompanying application. Accordingly, Applicant has submitted an Abstract obviating the Examiner's objections to the formal matters in the Abstract, which are listed above. As such,

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Applicant respectfully requests the above objection to be withdrawn.

**3. Objections to Claims 1, 4, 7-9, 14-15, 19-20, 23-25 and 18-30**

The Office Action states,

Claims 1, 4, 7-9, 14, 15, 19, 20, 23, 24, 25 and 28-30 are objected to because of the following informalities: in claims 1, 4, 7, 8, 9, 14, 15, 19, 24, 25, and 28, the coefficients on the carbon atoms of R are not subscripted. In claim 6 correct the spelling of tetrahydrofuran. In claim 16 "derives" would be better phrased --is made--. In claim 20, change "selected from" to --a--, make "compounds" singular, and delete "comprised". In claims 23 and 24, 1.2, change "selected from" to --a-- and make "ethers" singular. Further in claim 24, first line after the structure, radicals are not equal or different, they are the same or different as recited in claim 23; in the third line from the end make "radical" plural in both instances. In claims 29 and 30, change "selected from. . . .and" to --. . . or--. Appropriate correction is required.

**RESPONSE**

With regard to the Examiner's objections to claims 1, 4, 7, 8, 9, 14, 15, 19, 24, 25, and 28 for the coefficients on the carbon atoms of R not being subscripted, Applicant has amended these claims to correct this formality. Accordingly, Applicant respectfully requests the Examiner to withdraw this objection.

With regard to the Examiner's objection to claim 6 for the term tetrahydrofuran not being spelled right, Applicant has amended this claim to correct this formality. Accordingly, Applicant respectfully requests the Examiner to withdraw this objection.

With regard to the Examiner's objection to claim 20 for reciting the phrase "selected from", and the terms "compounds" and

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"comprised", Applicant has amended this claim as suggested by the Examiner. Accordingly, Applicant respectfully requests the Examiner to withdraw this objection.

With regard to the objection to claim 16 for reciting the term "derives", Applicant respectfully traverses this rejection. In particular, Applicant believes claim 16 complies with 35 U.S.C. 112, and a person having ordinary skill in the art would appreciate the metes and bounds of claim 16 as currently recited. Accordingly, Applicant believes claim 16 does not need to be amended. However, Applicant would be willing to amend claim 16 to delete the term "derives" and replace it with the phrase "is made", if the Examiner is willing to concede that no claim scope is surrendered by such an amendment. Accordingly, Applicant respectfully requests the Examiner to withdraw this objection.

With regard to the objection to claims 23 and 24 for reciting the phrase "selected from", and the term "ethers", Applicant respectfully traverses this rejection. In particular, Applicant has amended claims 23 and 24 as suggested by the Examiner to obviate the Examiner's 35 U.S.C. § 112, 2<sup>nd</sup> paragraph rejection. Accordingly, Applicant believes that claims 23 and 24 cannot simultaneously be amended as suggested above, and as suggested with regard to the 35 U.S.C § 112, 2<sup>nd</sup> paragraph rejection. Accordingly, Applicant has amended claims 23 and 24 as recommended by the Examiner to obviate the 35 U.S.C. § 112, 2<sup>nd</sup> paragraph rejection. As such, Applicant respectfully requests the Examiner to withdraw this objection.

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With regard to the objection to claim 24 for reciting the phrase "equal or different", Applicant respectfully traverses this rejection. In particular, Applicant believes claim 24 complies with 35 U.S.C. 112, and a person having ordinary skill in the art would appreciate the metes and bounds of claim 24 as currently recited. Accordingly, Applicant believes claim 24 does not need to be amended. However, Applicant would be willing to amend claim 24 to delete the phrase "equal or different" and replace it with the phrase "same or different", if the Examiner is willing to concede that no claim scope is surrendered by such an amendment. Accordingly, Applicant respectfully requests the Examiner to withdraw this objection.

With regard to the objection to claims 29 and 30 for reciting the phraseology "selected from. . . .and", Applicant respectfully traverses this rejection. In particular, Applicant believes claims 29 and 30 comply with 35 U.S.C. 112, and a person having ordinary skill in the art would appreciate the metes and bounds of claims 29 and 30 as currently recited. Accordingly, Applicant believes claims 29 and 30 do not need to be amended. However, Applicant would be willing to amend claims 29 and 30 to delete phraseology "selected from. . . .and" and replace it with the phraseology ". . . or", if the Examiner is willing to concede that no claim scope is surrendered by such amendments. Accordingly, Applicant respectfully requests the Examiner to withdraw this objection.

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**4. Rejection of Claims 1-30 under 35 U.S.C. 112, 2<sup>nd</sup> paragraph**

The Office Action states,

Claims 1-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In each independent claim, it is not clear how a silane can be a Lewis base since it has no lone pairs of electrons to donate to a corresponding Lewis acid. However, siloxanes, aka silicates or silicon ortho esters, would have oxygen atoms bonded to the silicon atoms and these oxygen atoms would have lone pairs of electrons available for donation to Lewis acid sites. Further in each independent claim, in the second line, "selected from" should be followed by --the group consisting of-- and the conjunction between the last two members of the closed Markush group should be --and--, not "or". This latter problem is also found in claims 2, 3, 21, 22, and 23 (twice).

**RESPONSE**

Claims 2 and 3 have been cancelled rendering any rejection thereof moot.

Notwithstanding, Applicant has amended each independent claim to remove the term "silanes" to further particularly point out and distinctly claim the subject matter which Applicant regards as the inventive subject matter. Accordingly, Applicant respectfully requests the Examiner to withdraw this rejection.

Additionally, Applicant has amended each independent claim to recite the phrase "the group consisting of" after "selected from", and amended the conjunction between the last two members of each group. Accordingly, Applicant respectfully requests the Examiner to withdraw this rejection.

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With regard to the Examiner's rejection of claims 21, 22, and 23, Applicant has amended claims 21, 22, and 23 to obviate the Examiner's rejection. Accordingly, Applicant respectfully requests the Examiner to withdraw this rejection.

**5. Rejection of Claims 19 and 22-30 under 35 U.S.C. 112, 1<sup>st</sup>**  
**paragraph**

The Office Action states,

Claims 19 and 22-30 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the catalyst being a Ziegler-Natta catalyst, does not reasonably provide enablement for e.g. a metallocene or ruthenium carbene catalyst. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims. The support is conventionally known as one for Ziegler-Natta catalysts, and the examples are all drawn to such catalysts; one of ordinary skill in the art would be required to perform undue experimentation to determine whether any other catalysts that require aluminum alkyl cocatalysts are capable of functioning with the claimed support.

**RESPONSE**

Applicant respectfully traverses the rejection of claims 19, and 22-30.

"There is a strong presumption that an adequate written description of the claimed invention is present in the specification as filed." *Wertheim*, 541 F.2d at 262, 191 USPQ 96. "Consequently, rejection of an original claim for lack of written description should be rare." See MPEP § 2163 II.



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Additionally, as long as the specification discloses at least one method for making and using the claimed invention that bears a reasonable correlation to the entire scope of the claim, then the enablement requirement of 35 U.S.C. 112 is satisfied. *In re Fisher*, 427 F.2d 833, 839, 166 USPQ 18, 24 (CCPA 1970). Failure to disclose other methods by which the claimed invention may be made does not render a claim invalid under 35 U.S.C. 112. *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1533, 3 USPQ2d 1737, 1734 (Fed. Cir.), cert. denied, 484 U.S. 954 (1987). See MPEP § 2164.01(b).

Applicant has provided 38 total exemplary embodiments, including 27 preferred, exemplary embodiments, and 11 comparative, exemplary embodiments. Moreover, along with the exemplary embodiments, Applicant has specified how to make and use these exemplary embodiments, as well as disclosed how to make and use the disclosed inventive subject matter as a whole.

With regard to the Examiner's contention that undue experimentation would be required, Applicant respectfully traverses this argument for basis for a rejection under 35 U.S.C. 112, 1<sup>st</sup> paragraph. In particular,

There are many factors to be considered when determining whether there is sufficient evidence to support a determination that a disclosure does not satisfy the enablement requirement and whether any necessary experimentation is 'undue.' These factors include, but are not limited to:

- (A) The breadth of the claims;
- (B) The nature of the invention;
- (C) The state of the prior art;
- (D) The level of one of ordinary skill;

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- (E) The level of predictability in the art;
- (F) The amount of direction provided by the inventor;
- (G) The existence of working examples; and
- (H) The quantity of experimentation needed to make or use the invention based on the content of the disclosure.

Additionally the fact that experimentation may be complex does not necessarily make it undue, if the art typically engages in such experimentation. *In re Certain Limited-Charge Cell Culture Microcarriers*, 221 USPQ 1165, 1174 (Int'l Trade Comm'n 1983), *aff'd. sub. nom., Massachusetts Institute of Technology v. A.B. Fortia*, 774 F.2d 1104, 227 USPQ 428 (Fed. Cir. 1985). The test of enablement is not whether any experimentation is necessary, but whether, if experimentation is necessary, it is undue. *In re Angstadt*, 537 F.2d 498, 504, 190 USPQ 214, 219 (CCPA 1976).

Accordingly, Applicant respectfully believes the current application complies with 35 U.S.C. 112, 1<sup>st</sup> paragraph, and respectfully requests the Examiner to withdraw this rejection.

**6. Rejection of Claims 1-13 and 19-30 under 35 U.S.C. 102(b)**

The Office Action states claims 1-13 and 19-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Yang, et al. (U.S. Patent 6,034,025). In particular, the Office Action states,

Yang discloses the invention as claimed (abstract; col. 3, l. 45 to col. 4, l. 59).

**RESPONSE**

Applicant respectfully traverses the rejection of claims 1-13 and 19-30.

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Claims 2, 3, and 7 have been cancelled rendering any rejection thereof moot.

Regarding claims 1, 4-6, 8-13, and 19-30, for a reference to anticipate an invention, all of the elements of that invention must be present in the reference. The test for anticipation under section 102 is whether each and every element as set forth in the claims is found, either expressly or inherently, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must also be arranged as required by the claim.

*In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990). There must be no differences between what is claimed and what is disclosed in the applied reference. *In re Kalm*, 154 USPQ 10, 12 (CCPA 1967); *Scripps v. Genentech Inc.*, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991). "Moreover, it is incumbent upon the Examiner to identify wherein each and every facet of the claimed invention is disclosed in the applied reference." *Ex parte Levy*, 17 USPQ2d 1461, 1462 (BPAI 1990). And the Examiner is required to point to the disclosure in the reference "by page and line" upon which the claim allegedly reads. *Chiong v. Roland*, 17 USPQ2d 1541, 1543 (BPAI 1990).

Applicant believes Yang, et al. fails to disclose, teach, or suggest, "Solid Lewis adducts comprising  $MgCl_2$ , a Lewis base (LB) selected from the group consisting of ethers, ketones, and alkyl

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esters of  $C_1$ - $C_{10}$  aliphatic carboxylic acids, and an alcohol ROH, in which R is a C1-C15 hydrocarbon group optionally substituted with heteroatom containing groups, which compounds are in molar ratios to each other defined by the following formula:  $MgCl_2(ROH)_m(LB)_n$  in which m ranges from 0.5 to 2.5, and n ranges from 0.07 to 6", as currently claimed by Applicant.

Additionally, Applicant believes Yang, et al. fails to disclose, teach, or suggest, "Catalyst components obtained by contacting a solid Lewis adduct comprising  $MgCl_2$ , a Lewis base (LB) selected from the group consisting of ethers, ketones, and alkyl esters of  $C_1$ - $C_{10}$  aliphatic carboxylic acids, and an alcohol ROH, in which R is a C1-C15 hydrocarbon group optionally substituted with heteroatom containing groups, which compounds are in molar ratios to each other defined by the following formula:  $MgCl_2(ROH)_m(LB)_n$  in which m ranges from 0.5 to 2.5, and n ranges from 0.07 to 6, with compounds of transition metals belonging to one of the groups 4 to 6 of the Periodic Table of Elements (new notation)", as currently claimed by Applicant.

Moreover, Applicant believes Yang, et al. fails to disclose, teach, or suggest, "A catalyst system for the polymerization of alpha-olefins  $CH_2=CHR$ , wherein R is hydrogen or a hydrocarbon radical having 1-12 carbon atoms, obtained by contacting a catalyst component with at least one organoaluminum compound, the catalyst component being obtained by contacting a solid Lewis adduct comprising  $MgCl_2$ , a Lewis base (LB) selected from the group consisting of ethers, ketones, and alkyl esters of  $C_1$ - $C_{10}$  aliphatic carboxylic acids, and

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an alcohol ROH, in which R is a C1-C15 hydrocarbon group optionally substituted with heteroatom containing groups, which compounds are in molar ratios to each other defined by the following formula:  $MgCl_2(ROH)_m(LB)_n$  in which m ranges from 0.5 to 2.5, and n ranges from 0.07 to 6, with compounds of transition metals belonging to one of the groups 4 to 6 of the Periodic Table of Elements (new notation)", as currently claimed by Applicant.

Even more so, Applicant believes Yang, et al. fails to disclose, teach, or suggest, "A process comprising polymerizing of olefins in the presence of a catalyst obtained by contacting a catalyst component with at least one organoaluminum compound, the catalyst component being obtained by contacting a solid Lewis adduct comprising  $MgCl_2$ , a Lewis base (LB) selected from the group consisting of ethers, ketones, and alkyl esters of  $C_1$ - $C_{10}$  aliphatic carboxylic acids, and an alcohol ROH, in which R is a C1-C15 hydrocarbon group optionally substituted with heteroatom containing groups, which compounds are in molar ratios to each other defined by the following formula:  $MgCl_2(ROH)_m(LB)_n$  in which m ranges from 0.5 to 2.5, and n ranges from 0.07 to 6, with compounds of transition metals belonging to one of the groups 4 to 6 of the Periodic Table of Elements (new notation)", as currently claimed by Applicant.

In particular, Applicant believes Yang, et al. fails to disclose, teach, or suggest Applicant's currently claimed solid Lewis adducts, which comprise  $MgCl_2$ , the particularly claimed Lewis base, and the particularly claimed alcohol, wherein the constituents are in the particularly claimed ratios.

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In fact, Yang, et al. discloses a magnesium halide compound solution, wherein a mixture of two or more kinds of alcohols and cyclic ether may be used as a solvent. See col. 3, lines 45-47.

In light of the above, claims 1, 4-6, 8-13, and 19-30 are believed to not be anticipated by, and are patentable over Yang, et al. Accordingly, reconsideration and withdrawal of the rejection is requested.

**7. Rejection of Claims 1-13 and 19-30 under 35 U.S.C. 102(b)**

The Office Action states claims 1-13 and 19-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Iiskolan, et al. (U.S. Patent 4,829,034). In particular, the Office Action states, Iiskolen discloses the invention as claimed (col. 5-6, example 1).

**RESPONSE**

Applicant respectfully traverses the rejection of claims 1-13 and 19-30.

Claims 2, 3, and 7 have been cancelled rendering any rejection thereof moot.

Regarding claims 1, 4-6, 8-13, and 19-30 for a reference to anticipate an invention, all of the elements of that invention must be present in the reference. The test for anticipation under section 102 is whether each and every element as set forth in the claims is found, either expressly or inherently, in a single prior art reference. *Verdegaal Bros. V. Union Oil Co. of California*, 2

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USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must also be arranged as required by the claim.

*In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990). There must be no differences between what is claimed and what is disclosed in the applied reference. *In re Kalm*, 154 USPQ 10, 12 (CCPA 1967); *Scripps v. Genentech Inc.*, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991). "Moreover, it is incumbent upon the Examiner to identify wherein each and every facet of the claimed invention is disclosed in the applied reference." *Ex parte Levy*, 17 USPQ2d 1461, 1462 (BPAI 1990). And the Examiner is required to point to the disclosure in the reference "by page and line" upon which the claim allegedly reads. *Chiong v. Roland*, 17 USPQ2d 1541, 1543 (BPAI 1990).

Applicant believes Iiskolan, et al. fails to disclose, teach, or suggest, "Solid Lewis adducts comprising  $MgCl_2$ , a Lewis base (LB) selected from the group consisting of ethers, ketones, and alkyl esters of  $C_1$ - $C_{10}$  aliphatic carboxylic acids, and an alcohol ROH, in which R is a  $C_1$ - $C_{15}$  hydrocarbon group optionally substituted with heteroatom containing groups, which compounds are in molar ratios to each other defined by the following formula:  $MgCl_2(ROH)_m(LB)_n$  in which m ranges from 0.5 to 2.5, and n ranges from 0.07 to 6", as currently claimed by Applicant.

Additionally, Applicant believes Yang, et al. fails to disclose, teach, or suggest, "Catalyst components obtained by contacting a

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solid Lewis adduct comprising  $\text{MgCl}_2$ , a Lewis base (LB) selected from the group consisting of ethers, ketones, and alkyl esters of  $\text{C}_1$ - $\text{C}_{10}$  aliphatic carboxylic acids, and an alcohol ROH, in which R is a  $\text{C}_1$ - $\text{C}_{15}$  hydrocarbon group optionally substituted with heteroatom containing groups, which compounds are in molar ratios to each other defined by the following formula:  $\text{MgCl}_2(\text{ROH})_m(\text{LB})_n$  in which m ranges from 0.5 to 2.5, and n ranges from 0.07 to 6, with compounds of transition metals belonging to one of the groups 4 to 6 of the Periodic Table of Elements (new notation)", as currently claimed by Applicant.

Moreover, Applicant believes Yang, et al. fails to disclose, teach, or suggest, "A catalyst system for the polymerization of alpha-olefins  $\text{CH}_2=\text{CHR}$ , wherein R is hydrogen or a hydrocarbon radical having 1-12 carbon atoms, obtained by contacting a catalyst component with at least one organoaluminum compound, the catalyst component being obtained by contacting a solid Lewis adduct comprising  $\text{MgCl}_2$ , a Lewis base (LB) selected from the group consisting of ethers, ketones, and alkyl esters of  $\text{C}_1$ - $\text{C}_{10}$  aliphatic carboxylic acids, and an alcohol ROH, in which R is a  $\text{C}_1$ - $\text{C}_{15}$  hydrocarbon group optionally substituted with heteroatom containing groups, which compounds are in molar ratios to each other defined by the following formula:  $\text{MgCl}_2(\text{ROH})_m(\text{LB})_n$  in which m ranges from 0.5 to 2.5, and n ranges from 0.07 to 6, with compounds of transition metals belonging to one of the groups 4 to 6 of the Periodic Table of Elements (new notation)", as currently claimed by Applicant.

Even more so, Applicant believes Yang, et al. fails to disclose.



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teach, or suggest, "A process comprising polymerizing of olefins in the presence of a catalyst obtained by contacting a catalyst component with at least one organoaluminum compound, the catalyst component being obtained by contacting a solid Lewis adduct comprising  $\text{MgCl}_2$ , a Lewis base (LB) selected from the group consisting of ethers, ketones, and alkyl esters of  $\text{C}_1$ - $\text{C}_{10}$  aliphatic carboxylic acids, and an alcohol ROH, in which R is a  $\text{C}_1$ - $\text{C}_{15}$  hydrocarbon group optionally substituted with heteroatom containing groups, which compounds are in molar ratios to each other defined by the following formula:  $\text{MgCl}_2(\text{ROH})_m(\text{LB})_n$  in which m ranges from 0.5 to 2.5, and n ranges from 0.07 to 6, with compounds of transition metals belonging to one of the groups 4 to 6 of the Periodic Table of Elements (new notation)", as currently claimed by Applicant.

In particular, Applicant believes Iiskolan, et al. fails to disclose, teach, or suggest Applicant's currently claimed Lewis adducts, which comprise  $\text{MgCl}_2$ , the particularly claimed Lewis base, and the particularly claimed alcohol, wherein the constituents, particularly the claimed alcohol (i.e., ROH), are in the particularly claimed ratios.

In fact, the section of Iiskolan, et al. outlined by the Examiner on page 4 of the currently pending Office Action (i.e., col. 5-6, and Example 1) discloses  $\text{MgCl}_2 \cdot 3 \text{ EtOH} \cdot 0.1 \text{ DIBP}$ , with Examples 2-4 having a molar ratio of EtOH of at least 2.9. Accordingly, the examples of Iiskolan, et al. are not within the scope of the currently pending claims.

Additionally, Applicant believes the general broad disclosure of

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Iiskolan, et al. does not anticipate Applicant's currently claimed solid Lewis adducts. "In order to anticipate the claims, the claimed subject matter must be disclosed in the reference with 'sufficient specificity' to constitute an anticipation under the statute." (Emphasis added) "If the claims are directed to a narrow range, and the reference teaches a broad range, depending on the other facts of the case, it may be reasonable to conclude that the narrow range is not disclosed with 'sufficient specificity' to constitute an anticipation of the claims." See *Atofina v. Great Lakes Chem. Corp.*, 441 F.3d 991, 999, 78 USPQ2d 1417, 1423, (Fed. Cir. 2006). Additionally, any evidence of unexpected results within the narrow range may also render the claims unobvious. See MPEP § 2131.03 II.

In light of the above, claims 1, 4-6, 8-13, and 19-30 are believed to not be anticipated by, and are patentable over Iiskolan, et al. Accordingly, reconsideration and withdrawal of the rejection is requested.

**8. Rejection of Claims 14-18 under 35 U.S.C. §103(a)**

The Office Action states claims 14-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Iiskolan, et al. (U.S. Patent 4,829,034) in view of Yang, et al. (U.S. Patent 6,034,025). In particular, the Office Action states,

The disclosure of Iiskolen has been discussed above.

Iiskolen lacks in its example 1 the use of a further solvent of the direct combination of the magnesium halide/alcohol adduct with a further Lewis base.

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However, Yang at col. 4, l. 22-30, teaches that the combination of the various ingredients that go to make up a magnesium chloride adduct support may conventionally occur in an inert hydrocarbon solvent., and since the alcohols of Yang and Iiskolen are already Lewis bases, the addition of a further Lewis base would have been conventional to the routineer in the art.

It would have been obvious to one of ordinary skill in the art to apply the teaching of Yang to the disclosure of Iiskolen with a reasonable expectation of obtaining a highly-useful method of making a magnesium chloride adduct with the expected benefit of being able to obtain finer particle sizes by breaking up the product by stirring in solution as it is made.

#### RESPONSE

Applicant traverses the rejection of claims 14-18.

Claim 18 has been cancelled rendering the rejection thereof moot.

With regard to claims 14-17, the U.S. Supreme Court in *Graham v. John Deere Co.*, 148 U.S.P.Q. 459 (1966) held that non-obviousness was determined under § 103 by (1) determining the scope and content of the prior art; (2) ascertaining the differences between the prior art and the claims at issue; (3) resolving the level of ordinary skill in the art; and, (4) inquiring as to any objective evidence of non-obviousness.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second; there must

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be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438. See MPEP §2142 and §2143.

Arguments regarding Iiskolan, et al. and Yang, et al. *supra* are incorporated herein by reference in their entirety. In addition to not disclosing, teaching, or suggesting Applicant's currently claimed solid Lewis adducts, the currently claimed adducts unexpectedly have a higher activity than those disclosed in Iiskolan, et al. or Yang, et al.

In particular, Applicant believes the activity of the catalyst components disclosed in Iiskolan, et al. range from 5.7 - 9.9 Kg/g (i.e., Kg of polymer produced per gram of catalyst used), with the catalyst components of Iiskolan, et al. having an average activity of 8.3 Kg/g. The activity of the catalysts disclosed in Yang, et al. range from 1.6 - 5.2 Kg/g, with the catalysts of Yang, et al. having an average activity of 3.8 Kg/g.

However, Applicant's currently claimed solid Lewis adducts unexpectedly have activities ranging from 9.3 - 107.6 Kg/g, with the average activity unexpectedly being 50.3 Kg/g. Accordingly, Applicant's currently claimed solid Lewis adducts have an average activity of more than 6 times the average activity of the catalyst components of Iiskolan, et al., and more than 13 times the average

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activity of the catalysts of Yang, et al.

In light of the above, claims 14-17 are believed to be non-obvious, and are patentably distinguishable over Iiskolan, et al. in view of Yang, et al. Accordingly, reconsideration and withdrawal of the rejection is requested.

#### CONCLUSION

Based upon the above remarks, the presently claimed subject matter is believed to be novel and patentably distinguishable over the references of record. The Examiner is therefore respectfully requested to reconsider and withdraw all rejections and allow all pending claims 1, 4-6, 8-17, and 19-30. Favorable action with an early allowance of the claims pending in this application is earnestly solicited.

The Examiner is welcomed to telephone the undersigned practitioner if he has any questions or comments.

Respectfully submitted,

By: 

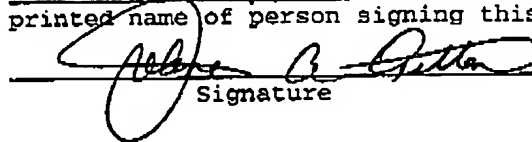
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